



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,226	12/16/2003	Jack L. Covault	03AB230	6338

63122 7590 08/23/2007
ROCKWELL AUTOMATION, INC./BF
ATTENTION: SUSAN M. DONAHUE, E-7F19
1201 SOUTH SECOND STREET
MILWAUKEE, WI 53204

EXAMINER

PATEL, DHARTI HARIDAS

ART UNIT	PAPER NUMBER
----------	--------------

2836

MAIL DATE	DELIVERY MODE
-----------	---------------

08/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

EL

Office Action Summary	Application No.	Applicant(s)	
	10/737,226	COVAULT, JACK L.	
	Examiner	Art Unit	
	Dharti H. Patel	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 12 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11, 12 and 21-24 is/are allowed.
- 6) ☒ Claim(s) 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Poe et al., Patent No. 6,646,847.

With respect to claim 25, Poe discloses an apparatus [Fig. 1] for limiting power consumption by a load that may be connected to power sources of varying voltages [col. 2, lines 25-30], the apparatus comprising an input terminal [Fig. 1, voltage sense device 104] that receives a value indicative of an input voltage to a load [Fig. 1, 104 senses the input voltage going to load], the load configured to operate during normal operation with a power consumption value that is less than a power consumption limit value [Fig. 2; under normal operation, the current flowing from drive circuit 112 to 104 is within the normal range, and therefore within a power consumption range]; and a current limiting circuit [Fig. 1, current sense device 102] to the input terminal [Fig 2, current sense device is connected to the voltage sense device, which has the input terminal] and operative to disconnect the load from the input voltage when the current to the load exceeds a current threshold [col. 2, lines 30-34], and wherein the current threshold [Fig. 1, 110] varies in response to variations in input voltage [abstract, lines 9-

Art Unit: 2836

11] such that a product of the current threshold [Fig. 1, 110] and input voltage [Fig. 1; voltage measured at voltage sense device 104] is substantially equal to the power consumption limit value [Fig. 1; voltage equals load times current. If the voltage varies, and load is constant, that means current has to vary according to the voltage. The input voltage should be considerably equal to the value of load times the current threshold 110. If the current to the load exceeds the current threshold, the load would be disconnected from the input voltage].

With respect to claim 26, Poe further comprises circuitry [Fig. 1, voltage sense device 104] connected to receive the value and compare the value to the current threshold [Fig. 1, variable threshold circuit] and modulate the input voltage based on the comparison to keep power to the load relatively constant.

With respect to claim 27, Poe further comprises circuitry that compares the input voltage to a reference voltage for the current threshold and adjusts the current threshold so that the current threshold varies as a function of the input voltage to keep power to the load relatively constant [abstract, lines 4-11, col. 2, lines 64-67, col. 3, lines 1-14].

Allowable Subject Matter

Claims 11-12 and 21-24 are allowed.

The following is an examiner's statement of reasons for indicating allowance of claim 11: The prior art does not disclose a second operational amplifier having an input coupled to the circuit element and having a second output connected to the second input of the comparator. This feature in combination with the rest of the claim limitations is not anticipated or rendered obvious by the prior art of record.

The following is an examiner's statement of reasons for indicating allowance of claims 12 and 21: The prior art does not disclose a second resistor, a third resistor, and a fourth resistor connected in series coupling the sensing node to the second input of the comparator; and second operation amplifier having one input connected to a point between the second resistor and the third resistor, another input connected to the circuit ground, and an output connected to another point between the third resistor and the fourth resistor. This feature in combination with the rest of the claim limitations is not anticipated or rendered obvious by the prior art of record. This feature in combination with the rest of the claim limitations is not anticipated or rendered obvious by the prior art of record.

Response to Arguments

Applicant's arguments filed 06/05/2007 have been fully considered but they are not persuasive.

Applicant comments on page 8 of the Remarks regarding claim 25 that Poe fails to teach or suggest that changes in the current threshold are inversely related to variation to the input voltage. Examiners points out that this limitation is not disclosed in claim 25.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Remarks, page 9, lines 10-11: "changes in the current threshold...") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification,

Art Unit: 2836

limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant comments on page 8 of the Remarks regarding claim 25 that Poe fails to teach or suggest that the circuit maintains power consumption by the load relatively constant by modulating the current threshold, thereby allowing a maximum current draw for a given input voltage. Examiner points out that this limitation is not disclosed in claim 25.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Remarks, page 8, line 16: "thereby allowing...") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Based on examiner's best understanding, it is believed that the prior art reference by Poe reads on the amended claim language of independent claim 25.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

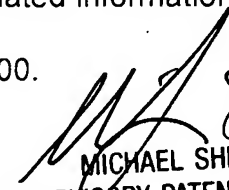
Art Unit: 2836

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dharti H. Patel whose telephone number is 571-272-8659. The examiner can normally be reached on 7:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2800, Ext. 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


8/24/07
MICHAEL SHERRY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800